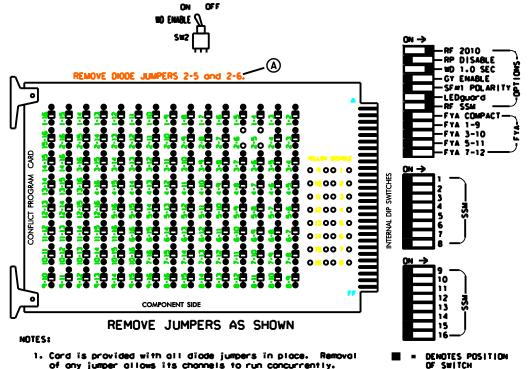
# EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

2. Make sure jumpers SEL2-SEL5 are present on the monitor board.



### 2070 CONFLICT MONITOR PROGRAMMING

THE CONFLICT MONITOR USED IN ALL NCDOT 2070 INSTALLATIONS IS THE EDI MODEL 2010ECL-NC. THE REPRESENTATION AT LEFT IS FOUND IN THE TOP LEFT CORNER ON ALL THE 2070 START DRAWINGS.

THE 2010ECL-NC HAS 16 MONITOR CHANNELS. THE DEFAULT CHANNEL TO LOAD SWITCH TO FUNCTION RELATIONSHIPS ARE AS FOLLOWS:

CHANNEL 1 S1 PHASE 1
CHANNEL 2 S2 PHASE 2
CHANNEL 3-S3-PHASE 3
CHANNEL 4 S4 PHASE 4
CHANNEL 5-S5-PHASE 5
CHANNEL 6-S6-PHASE 6
CHANNEL 7-S7-PHASE 7
CHANNEL 8 S8 PHASE 8
CHANNEL 9-S9 OVERLAP A
CHANNEL 10-S10-OVERLAP B
CHANNEL 11 S12 OVERLAP C
CHANNEL 12-S13-OVERLAP D
CHANNEL 13-S2P-PHASE 2 PED
CHANNEL 14-S4P-PHASE 4 PED
CHANNEL 15-S6P-PHASE 6 PED
CHANNEL 16-S8P-PHASE 8 PED

THE CHANNEL TO LOADSWITCH RELATIONSHIP IS FIXED IN THE CABINET HARDWARE. THE LOADSWITCH FUNCTION CAN BE CHANGED IN THE CONTROLLER SOFTWARE. LOADSWITCHES S9, S10, S12, AND S13 ARE ON THE AUXILIARY OUTPUT FILE.

#### **(A)** FEATURES:

REMOVE DIODE JUMPER NOTE - FOR ANY TWO MOVEMENTS TO BE ALLOWED TO RUN CONCURRENTLY, THE CORRESPONDING DIODE JUMPER MUST BE REMOVED ON THE MONITOR CARD. THIS INCLUDES NOT ONLY PHASES THAT CAN RUN CONCURRENTLY, BUT ALSO ANY PED OR OVERLAP THAT CAN RUN AT THE SAME TIME. ANY PERMISSIBLE COMBINATION THAT DOES NOT HAVE THE CORRESPONDING JUMPER REMOVED WILL RESULT IN AN UNWARRANTED CONFLICT FAULT AND PLACE THE INTERSECTION IN FLASH. CONVERSELY, REMOVING A JUMPER REPRESENTING A MOVEMENT THAT SHOULD NOT BE ALLOWED CREATES A DANGEROUS SCENARIO WHERE A TRUE CONFLICT CAN GO UNDETECTED. THIS NOTE LISTS THE JUMPERS THAT SHOULD BE REMOVED ON THE MONITOR CARD.

## 2070 Conflict Monitor Programming

SIGNALS MANAGEMENT SECTION
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STD. NO.

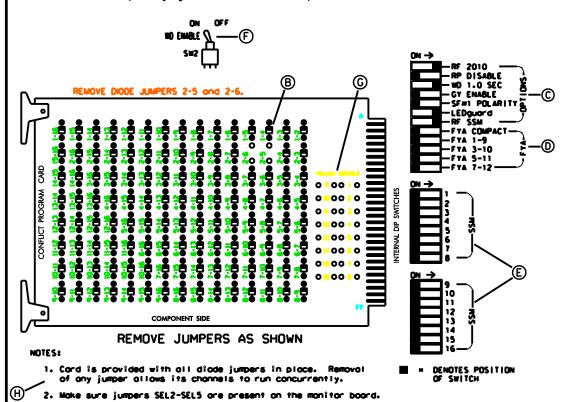
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SHEET 1 OF 2

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# EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



FEATURES (cont.):

- (B) MONITOR CARD PROGRAMMING THE ELECTRICAL DETAIL PROVIDES A GRAPHIC REPRESENTATION OF THE MONITOR CARD AFTER THE APPROPRIATE DIODE JUMPERS HAVE BEEN REMOVED AS DESCRIBED ABOVE. THIS DRAWING SHOULD ALWAYS MATCH THE REMOVE DIODE JUMPER NOTE DIRECTLY ABOVE.
- © OPTION SWITCHES THESE DIP SWITCHES CONTROL A VARIETY OF OPTIONAL SETTINGS FOR THE 2010ECL-NC MONITOR. THE SETTINGS SHOWN AT LEFT SHOULD BE USED FOR ALL ELECTRICAL DETAILS. FOR MORE INFORMATION ON THESE OPTIONS, REFER TO THE MANUFACTURER'S OPERATIONS MANUAL.
- E SSM SWITCHES THESE SWITCHES ARE USED TO ENABLE DUAL INDICATION AND MINIMUM YELLOW CLEARANCE MONITORING ON INDIVIDUAL MONITOR CHANNELS. IN GENERAL, ANY CHANNEL THAT HAS BOTH A GREEN AND A YELLOW INDICATION IN THE FIELD SHOULD HAVE ITS SSM SWITCH SET TO THE 'ON' POSITION. CHANNELS USED TO MONITOR PEDESTRIAN MOVEMENTS OR THE GREEN ARROW ONLY FOR A FOUR-SECTION HEAD SHOULD BE SET TO THE 'OFF' POSITION.
- (F) WATCHDOG ENABLE ENABLES THE CONTROLLER WATCHDOG MONITORING FEATURE. IF THE MONITOR FAILS TO SENSE THE LOGIC LEVEL SIGNAL BEING TOGGLED BY THE CONTROLLER A 'WDT ERROR' FAULT WILL BE TRIGGERED. SHOULD ALWAYS BE SHOWN IN THE 'ON' POSITION.
- © YELLOW DISABLE JUMPERS THIS FEATURE ALLOWS THE MINIMUM YELLOW CHANGE MONITORING TO BE DISABLED FOR A CHANNEL BEING USED FOR A PEDESTRIAN MOVEMENT. ALSO, SINCE NCDOT ALSO DOES NOT MONITOR DUAL INDICATION FOR PEDS, THE SSM SWITCHES FOR THOSE CHANNELS SHOULD BE SET TO 'OFF', MAKING THE USE OF THE YELLOW DISABLE JUMPERS UNNECESSARY.
- MONTES THESE TWO NOTES SHOULD APPEAR WITH THE CONFLICT MONITOR PROGRAMMING DETAIL ON ALL 2070 ELECTRICAL DETAILS. THE FIRST NOTE IS A SHORT DESCRIPTION OF HOW THE PROGRAMMING CARD WORKS. THE SECOND NOTE REFERS TO A SET OF OPTION JUMPERS FOUND ON THE MONITOR BOARD. FOR MORE INFORMATION ON THESE OPTIONS, REFER TO THE MANUFACTURER'S OPERATIONS MANUAL.

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